Course Number and Name

BEC6L3-COMMUNICATION ENGINEERING-II LAB

Credits and Contact Hours

2 and 45

Course Coordinator's Name

Mr R.Mohanraj

Text Books and References

LAB MANUAL

Course Description

- To demonstrate digital communication concepts using hands-on experience and using simulation environments such as PSPICE /Multisim, or Matlab/Simulink, or LabVIEW.
- To use commercial, modular systems which have some distinct advantages over bread boarding to examine more complex communication topics and to deliver a hands-on laboratory experience.

Prerequisites	Co-requisites
Communication engineering-I Lab	Communication Engineering-II

required, elective, or selected elective (as per Table 5-1)

Required

Course Outcomes (COs)

CO1: To understand linear time invariant system with random inputs, and optimum receiver for AWGN channel.

CO2: To understand the Discrete channel models and its properties

CO3: To understand the Continuous channel models and its properties

CO4: Execute hardware implementation

CO5: They will have knowledge of basic types of digital modulation (ASK, FSK, and PSK) from mathematical description

CO6: Develop understanding about performance of digital communication systems

Student Outcomes (SOs) from Criterion 3 covered by this Course

COs/SOs	a	b	c	d	e	f	g	h	i	j	k
CO1	H					M		L	M		L
CO2	M	L	H								
CO3	M			H						L	
CO4	M				H		M		H		H
CO5		L						M			
CO6						H				H	

List of Topics Covered
1. FSK Modulation and Demodulation. 2. PSK Modulation and Demodulation. 3. QPSK Modulation and Demodulation. 4. DPSK Modulation and Demodulation. 5. PAM Modulation and Demodulation. 6. PWM Modulation and Demodulation. 7. PPM Modulation and Demodulation. 8. Pulse Code Modulation and Demodulation. 9. Delta Modulation and Demodulation. 10. Differential Pulse Code Modulation and Demodulation. 11. Data formatting. 12. BER comparison of different modulation schemes in AWGN channel in MATLAB , Simulink..